BY ORDER OF THE COMMANDER
30TH SPACE WING

30TH SPACE WING INSTRUCTION 15-101

15 DECEMBER 2001

Weather

WEATHER SUPPORT PROCEDURES

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction identifies services, responsibilities, and procedures for weather support on Vandenberg Air Force Base (AFB) and is required by AFMAN 15-129, ***Aerospace Weather Operations – Processes and Procedures.*** It outlines weather support provided by the 30th Weather Squadron (30 WS) to Vandenberg AFB (VAFB) and the Western Range (WR), including support to launch operations; battle staff and contingency operations, staff support; Department of Defense (DoD) contractor support; and training. All agencies who receive support from or provide support to 30 WS are required to review this instruction annually during the anniversary month. Send recommended changes, in writing, to 30 WS/DO (900 Corral Rd, Bldg 21150, Vandenberg AFB CA 93437-5002). This instruction applies to all units assigned to VAFB.

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed. This document has been revised to include or incorporate: changes in observing and forecasting sites; adjusts the airfield observing criteria; agencies receiving weather notifications; Identification of the Automated Meteorological Information System (AMIS) which has replaced the Automated Weather Distribution System (AWDS); changes to AMIS site locations; change in Pilot-to-Metro Service (PMSV) radio frequency; and, various administrative changes.

1. General. 30 WS provides or arranges for all weather services to the 30th Space Wing and other units assigned to or operating on VAFB and the WR. 30 WS provides: surface and upper-air weather observations; launch and flight weather briefings; forecasts; issues weather warnings, watches and advisories; battle staff briefings; climatological services; meteorological assessments on operations and plans; and, staff weather support.

1.1. Terms Explained. References, Abbreviations, Acronyms, and Terms are listed and explained in **Attachment 1**.

1.2. 30th Space Wing Mission. The 30th Space Wing is home to the WR and manages Department of Defense space and missile testing, and placing satellites into near-polar orbit from the West Coast, using expendable boosters (Delta II, Atlas, Titan II and Titan IV). Wing personnel also support the Minuteman III and Peacekeeper Intercontinental Ballistic Missile Follow-on Operational Test and Evaluation Launch program. The WR begins at the coastal boundaries of Vandenberg and extends westward from the California coast to the western Pacific including sites in Hawaii. Operations involve dozens of federal and commercial interests. The wing is organized into operations, logistics, medical, and support groups. The wing's staff agencies include command post, safety, treaty, staff judge advocate, comptroller, manpower and organization, Heritage Center, plans and requirements, public affairs, history, military equal opportunity, chaplain, and protocol.

1.3. 30 WS Mission. 30 WS provides operational and staff support to the 30 SW, Space and Missile Systems Center (SMC), NASA, & tenant units. Provides weather services for all DoD, NASA, & commercial spacelift/ballistic missile launches & air operations on VAFB and the WR. Field and sustain weather systems to support WR. Observe and forecast the weather for DoD & commercial spacelift, ballistic missile test, & air operations on WR and west coast offshore operating area. Protect VAFB/30 SW resources and people. Provide trained weather professionals to support contingencies worldwide. Provide weather data and studies for planning.

1.4. Supported Agencies Missions, Weapon Systems and Weather Sensitivities. Specific details for supported agencies, weapon systems and weather sensitivities are addressed in Chapter 2 of the Forecast Reference Notebook. Launch vehicle specific weather sensitivities and support requirements are identified within the Universal Documentation System.

1.5. Duty Priorities. 30 WS operations personnel can become task saturated at times (e.g., sudden onset of severe weather). To assist 30 WS personnel in prioritization of customer support during such times, principal duty priorities are defined in **Attachment 2.** 30 WS forecasters and observers will adhere to and supported agencies should have an understanding of these priorities.

1.6. Limitations.

1.6.1. 30 WS issues operational forecasts valid for periods up to 24 hours. Beyond 24 hours, all forecasts are for planning/information only. Forecasts or outlooks beyond 10 days are largely based on climatology.

1.6.2. Adequate notice is essential for optimum support. Agencies requiring weather support should contact 30 WS (606-8022) with the pertinent details as early as possible. Agencies requiring recurring support should contact the 30 WS/DO, Operations Officer (606-8684).

1.6.3. The expanse and topography of the WR requires regional tailoring of forecast support and products. All warnings/watches/advisories will extend out to and include 10 Nautical Miles (NM) from the VAFB boundary. The exception is warnings pertaining to winds, which are issued to

cover North VAFB, South VAFB, and/or the airfield. No warnings/watches/advisories will be issued for the airfield during periods of airfield closure. In these cases, North VAFB notices will apply to the airfield environment. Specific warning/watch/advisory procedures are detailed in **Paragraph 4.** and **Paragraph 5.**

1.6.4. Representative Observation Site (ROS) Limitations. The ROS is located behind building 1765 (balloon shelter), with the airfield complex 1 ½ miles to the south. The facility does not allow a 360-degree view of the runway complex from the official observation point.

1.6.5. Alternate Observing Site (AOS) Limitations. The AOS is located behind building 1746. Buildings adjacent to the flightline and trees restrict the view from the northeast to southeast, out to approximately 3/8 miles.

1.6.6. Automated Surface Observing System (ASOS). 30 WS uses an ASOS for most elements of a surface observation. Weather observer quality control the observations during scheduled open hours. The ASOS also has the capability to provide a fully automated weather observation. During times when the observing operations are closed, the ASOS still provides a non-augmented observation. Certain ASOS components and algorithms have technical limitations AFMAN 15-111, para 13.3.4 discusses these limitations in detail.

1.6.7. Runway Visual Range (RVR) Limitations. The ROS does not have the capability to provide RVR. The AOS does have the capability to provide instantaneous RVR readings for local dissemination only. The weather squadron requires advance notice of RVR requirement to station an observer at the AOS. VAFB does not have the capability to provide a 10 minute average RVR from either the ROS or AOS.

1.7. Responsibilities.

1.7.1. Commander, 30th Weather Squadron (30 WS/CC), is responsible for all meteorological support at VAFB. 30 WS/CC will:

1.7.1.1. Communicate directly with all commanders and staff agencies concerning weather operations and support.

1.7.1.2. Ensure provision of weather support to all DoD units and contractors on VAFB.

1.7.1.3. Organize, train, equip, and provide operational, administrative, and logistical support for all WR and base weather operations and staff functions.

1.7.1.4. Ensure observation, forecast and notification of weather phenomena for resource protection of facilities and personnel on VAFB complex.

1.7.1.5. Plan for the acquisition, integration, and support of weather sensing and processing systems to meet current and future base/wing mission requirements.

1.7.1.6. Participate on boards and committees concerning weather issues.

1.7.1.7. Provide or arrange weather briefings for: 30 SW Battle Staff; Operations Status Meetings (OSM); Strategic Arms Reduction Treaty (START); Chemical Warfare Convention (CWC); deployment; and, other meetings, as required.

1.7.1.8. Ensure duties of 30 WS leadership do not prevent availability to assist in the severe weather management process.

1.7.1.9. Provide 30 SW/CC an assessment of 30 WS's technical capabilities and upchannel

requests for assistance, as required.

1.7.2. 30 WS Operations Officer (30 WS/DO) directs operational weather support for DoD, NASA, commercial and military, ballistic and spacelift programs, conventional flight operations, senior staff support and resource protection. 30 WS/DO will:

1.7.2.1. Establish and maintain launch/range weather training and unit standardization and evaluation programs.

1.7.2.2. Provide trained and certified weather mission support commander, Launch Weather Officers (LWO), balloon editors, toxic forecasters, range weather forecasters, and range weather observers in support of all launch and aviation operations.

1.7.2.3. Facilitate WR Severe Weather Preparedness Committee meetings.

1.7.2.4. Ensure back-up support for weather operations is established where needed.

1.7.2.5. Provide weather scenario inputs to 30 SW/IGI for base-wide exercises.

1.7.3. 30 WS Standardization, Evaluation and Training Flight (30 WS/DOV) develops standardization and evaluation and training materials and procedures for all 30 WS operations personnel/positions. Includes evaluator, instructor and mission training and certification. Maintains training records and ensures completion of forecaster, observer and launch weather team training. 30 WS/DOV will:

1.7.3.1. Manage squadron standardization and evaluation program. Assess individual proficiency, training effectiveness, and standardize launch operating procedures and written documentation.

1.7.3.2. Manage unit mobility and exercise evaluation programs to include training, certification and readiness of personnel subject to deploy in support of DoD worldwide operations.

1.7.3.3. Provide Launch Weather Team Initial Qualification Training (IQT) and Weather Mission Support Commander Training.

1.7.4. 30 WS Launch Weather Operations Flight (30 WS/DOR) develops and provides operational weather support for all WR ballistic missile and spacelift launch activities. 30 WS/DOR will:

1.7.4.1. Evaluate all Universal Document System (UDS) materials, provide comment and coordinate required changes with 30 Range Squadron (RANS) Program Support Manager. Provide requested responses to customer's Program Requirements and Operations Requirements Documents.

1.7.4.2. Ensure tailored operational weather briefings and launch weather support per launch mission Operation Directives (OD).

1.7.4.3. Develop and ensure compliance of operating instructions and procedures for launch weather team activities.

1.7.4.4. Direct and conduct weather balloon support for launch and routine operations.

1.7.4.5. Ensure weather instrument and support requirements for launch operations are identified and forwarded to 30 SW/SEO for inclusion in the Range Safety Operations Requirements (RSOR).

1.7.4.6. Consult on improvements to lightning Launch Commit Criteria in coordination with NASA and the Lightning Advisory Panel.

1.7.5. 30 WS Base Weather Operations Flight (30 WS/DOO) provides resource protection using criteria established in **Attachment 9**, **Attachment 10**, and **Attachment 11**; Toxic Hazard Zone (THZ) forecasts; and operational weather support for all base aviation and launch activities and WR aeronautical missions. 30 WS/DOO will:

1.7.5.1. Ensure issuance of forecasts for the airfield, local area, and flying operations.

1.7.5.2. Provide meteorological mission watch in support of VAFB aviation and launch operations and issue required weather warnings, watches, advisories and cold-spill (only) THZ for protection of personnel and facilities.

1.7.5.3. Operate, monitor, and provide training to appropriate base agencies, as required, on meteorological sensing and dissemination systems.

1.7.5.4. Provide aircrew briefings and monitor Pilot-to-Metro Service (PMSV) radio.

1.7.5.5. Provide initial local weather observation training and certification to all tower personnel (Air Traffic Control) to take limited weather observations.

1.7.5.6. IAW AFI 10-229, ***Aerospace Weather Operations – Processes and Procedures***, provide the following information for OPREP-3 BEELINE reports to 30 SW/CP:

1.7.5.6.1. The actual severe weather conditions experienced.

1.7.5.6.2. The forecast valid for the time of the occurrence and any watches or warnings issued.

1.7.5.6.3. The operational status of meteorological equipment at the time of the event.

1.7.5.7. Provide updated weather operations and sensor information for publication in Notice to Airmen (NOTAM) and Flight Information Publications (FLIP) to 30 OSS/OSAA

1.7.6. 30 WS Systems Officer (30 WS/SY) manages efforts to sustain, modernize, and support base and WR weather sensing and processing systems, and required communications. 30 WS/SY will:

1.7.6.1. Be the technical lead to define 30 WS and supported customer requirements for new weather information systems and develop plans to acquire, integrate, and support these systems.

1.7.6.2. Manage maintenance and modification of WR support weather computer systems, instrumentation systems, and data transfer (primary and back-up communications) equipment.

1.7.6.3. Establish and provide oversight of appropriate contractor-supplied weather systems support. Utilizes the 30 LG/LGPQ Technical Customer Feedback process when identifying performance concerns relative to contractor-supplied weather system support.

1.7.6.4. Direct/provide/oversee meteorological and climatological research/studies and scientific services in support of DoD/DoD-contracted or unit missions and operations.

1.7.7. 30 WS Systems Plans and Requirements Flight (30 WS/SYR) provides technical expertise to identify requirements and develop plans to modify and replace logistically unsupportable weather systems. 30WS/SYR will:

1.7.7.1. Identify WR weather support requirements and provide technical user interface into the development of plans for the modification, acquisition, integration, and support of weather data sensing/processing systems to meet current and future needs.

1.7.7.2. Upon request, provide meteorological/climatological services and/or studies affecting WR activities. WR agencies requiring such support can contact 30 WS/SYR at 606-2550.

1.7.7.3. Consult on improvements to lightning Launch Commit Criteria in coordination with NASA and the Lightning Advisory Panel.

1.7.8. Systems Support Flight (30 WS/SYS) is responsible for the maintenance, modification, and operation of existing weather data sensing and processing and communications systems. 30 WS/SYS will:

1.7.8.1. Oversee all matters concerning configuration management of weather sensing and processing systems.

1.7.8.2. Act as technical advisor to acquisition program manager and quality assurance specialist (LGP) for the weather system mission support requirements, provide inputs on "fitness" of performance of all weather related support activities (operations, maintenance, engineering, software development and operational analysis).

1.7.8.3. Represents 30 WS at interagency working groups that manage the weather information network connecting weather systems.

1.7.8.4. Design launch customer access of weather data information from squadron server and web site.

1.8. Release of Weather Information. Support to non-DoD agencies and the public will generally not be provided until the 30 WS/CC or designated representative, 30 SW Public Affairs Office, and 30 SW Legal Office has approved as appropriate.

2. Forecasting Services.

2.1. Hours of Operation. The Weather Operations Center (Wx Ops), located in Bldg 21150, is normally operational 24 hours a day, 7 days a week. Closures can occur on holidays and weekends with no scheduled range or flying operations. Closure will be coordinated with the Wing Operations Center.

2.2. Terminal Aerodrome Forecasts (TAF). Wx Ops forecasters prepare and disseminate (via the Automated Meteorological Information System (AMIS)) a TAF (**Attachment 3**) for the area within a 5 statute mile radius of the airfield at 0000L, 0800L, and 1600L daily.

2.2.1. The TAF is valid for a 24-hour period. It specifies occurrence time of significant weather to the nearest hour, its forecasted duration, and its intensity where applicable.

2.2.1.1. TAFs disseminated when the airfield is open, or when the 76 HF are conducting flying operations, will be amended for conditions listed in **Attachment 4**.

2.2.1.2. Forecasts disseminated when the airfield is closed will be amended only when the Wx Ops forecaster does not consider the TAF to be representative of existing conditions and those conditions are expected to last for 30 minutes or longer, or weather warning criteria are met for the airfield. TAFs issued when the airfield is closed are indicated by the words "LIMITED

MET WATCH" on the last line. Typically, airfield closure will apply to all weekend and holiday TAFs.

2.3. Briefing Services. Wx Ops forecasters provide flight weather briefings by telephone. Flight departure, enroute, and destination weather is briefed using DD Form 175-1**, Flight Weather Briefing**, or local form. For WR missions briefings will include off shore weather conditions, sea states and other information, as requested.

2.4. Pilot to Metro Services (PMSV). Wx Ops forecasters provide PMSV 24 hours a day on assigned frequency 342.4MHz. Aircrews shall relay pilot reports (PIREP) during PMSV contacts.

2.5. Launch Forecasts. Launch weather officers provide operational weather forecasts for all spacelift and ballistic missile launches. Advance L-X day forecasts will be provided in the standard format shown in **Attachment 5**.

2.6. Range Forecasts. Wx Ops forecasters provide support to scheduled WR operations/tests. With the exception of launch operations, if changes to weather support requirements are expected for a specific operation/test, coordinate with the Wx Ops forecaster at 606-8022.

2.7. THZ Forecasts. Wx Ops personnel prepare/disseminate cold-spill THZs using the Air Force Toxic (AFTOX) diffusion model. Specific information is provided in **Attachment 6** and 30 SWI 91-106, ***Toxic Hazard Assessments.***

2.7.1. Each THZ is issued with a 2-hour valid time and monitored and verified 45 minutes and 90 minutes into the valid period.

2.7.2. THZs will be amended in accordance with launch facility and safety requirements outlined in **Attachment 6**.

2.7.3. The originator of the request receives the THZ by phone and/or AMIS.

2.7.4. Hot-spill toxic forecasts are prepared and disseminated by 30 SW/SE incorporating data provided by Wx Ops personnel.

2.8. Automatic Telephone Answering Device (ATAD) Recording. Other duties permitting, the Wx Ops disseminates a plain language, public forecast via the ATAD. The recording (606-6666) is for non-operational use only.

2.9. 30 WS web site. Our web is maintained on the VAFB intranet. This site provides a link to weather information for personnel and agencies operating on the Western Range. It includes climatology, observations, weather impacts to range operations, range and launch forecasts and severe weather information.

2.10. Alternate Forecast Site (AFS). In the event Bldg 21150 is evacuated, forecasting operations and toxic hazard zone support will be conducted from the Weather Control Center.

3. Observing Services.

3.1. Duty Hours. At a minimum, Weather Observers at the ROS provide surface observing services from 1 hour prior to scheduled airfield opening until airfield closes. Weather observers also conduct daily upper-air soundings/observations at 0000 UTC (ZULU) and 1200 UTC (ZULU), and as required for WR operations.

3.2. Basic Weather Watch (BWW). A BWW is conducted from the ROS, Bldg 1764, during airfield operating hours and/or when an observer is on duty.

3.3. Cooperative Weather Watch. Vandenberg control tower personnel will perform a cooperative weather watch, IAW **Paragraph 6.11.6**, and notify the observer of previously unreported changes in the weather which could be critical to flight safety or other WR operations.

3.4. Special and Local Weather Observation Criteria. Criteria are derived from recommendations in AFMAN 15-111, ***Surface Weather Observations,*** and from DoD Flight Information Publications (FLIP) published specifically for VAFB. Criteria are defined in **Attachment 7** and **Attachment 8**.

3.5. Limited Observation Support. Agencies requiring surface observing support from other VAFB locations will coordinate in advance with the Base Weather Operations (606-3210) or Launch Weather Operations (606-2553) flight chiefs, respectively.

3.6. Dissemination of Observations. Augmented airfield observations are disseminated base-wide and to the worldwide network via AMIS when observers are on duty at the ROS. Automated (non-augmented) airfield observations will be disseminated when observers are not on duty at the ROS.

3.7. Upper-Air Observing. Typically, upper-air operations conducted from Bldg 1764, North VAFB with Bldg 900 acting as a back-up facility. Prior to launch of Rawinsonde or Jimsphere balloons, not associated with launch operations, upper-air observing personnel will obtain clearance from the VAFB control tower, when manned. Upper-air personnel will contact Los Angeles Center prior to launching balloons when the VAFB control tower is not manned.

3.8. High Temperature Notification . The Wx Ops forecaster will notify the 381 TRSS Military Training Flight at 5-2550 or 6-3181 when the temperature on the VAFB catonment area reaches 85 ^{o}F during normal duty hours.

4. Weather Warnings/Watches Procedures.

4.1. General. A Weather Warning is a special notice provided when a weather condition severe enough to pose a hazard to property or life is occurring or is expected to occur, and for which agencies must take protective actions. A Weather Watch is a notice issued to advise affected agencies of the potential for weather warning conditions before actually issuing the warning, allowing affected agencies advance notice to prepare/plan for action.

4.2. Weather Warning/Watch Criteria. Wx Ops forecasters prepare and issue weather warnings/watches for VAFB as defined in **Attachment 9**.

5. Weather Advisories.

5.1. General. A Weather Advisory is a special notice provided when a weather condition could affect local operations.

5.2. Weather Advisory Criteria. Wx Ops forecasters prepare and issue weather advisories for VAFB as defined in **Attachment 10**.

6. Reciprocal Support.

6.1. IAW AFI 10-229, all supported on-/off-base agencies will develop procedures to notify all unit activities and personnel of severe weather warning/watch messages and to take protective measures to protect and safeguard personnel, equipment, and facilities. Procedures should include primary and back-up notification methods (e.g., if phone lines are down).

6.2. 30th Space Wing Commander (30 SW/CC) will serve as Chair for the Western Range Severe Weather Preparedness Committee IAW AFI 10-229. Meetings will be annual and address at minimum:

6.2.1. Severe weather observing/forecasting capabilities.

6.2.2. Warning/Watch Threshold values, Desired Lead-Times and Acceptable False Alarm Rates.

6.2.3. Adequacy of dissemination procedures.

6.2.4. Adequacy of protective action procedures/resources.

6.2.5. Adequacy of severe weather awareness training and exercise procedures.

6.3. 30th Space Wing Operations Center (30 SW/WOC) will:

6.3.1. Relay weather warnings, watches and advisories to agencies identified in **Attachment 11**.

6.3.1.1. Should the AMIS be inoperative, relay above information and THZs to Frontier Control first, then proceed with **Attachment 11** notifications.

6.3.2. Notify 30 WS of accidents, mishaps, incidents, wildland fires or any other changes to normal operations requiring weather support.

6.3.3. Inform 30 WS of any incident or significant event involving weather service or 30 WS personnel.

6.3.4. Coordinate, if time permits, with 30 WS/CC or DO before transmitting a significant event message to higher headquarters involving weather events, service, or personnel.

6.3.5. Send BEELINE reports up-channel when severe weather (defined as winds of ≥ 50kts, hail of ≥ ¾" and/or a tornado) causes significant damage or impedes operations.

6.3.6. Inform 30 WS directly or through the Contingency Support Staff of Alert Condition (LERTCON), Force Protection Condition, or INFOCON changes.

6.3.7. Conduct quarterly (minimum) tests of primary and back-up weather watch/warning dissemination systems.

6.3.8. Inform 30 WS when the Command Post AMIS is inoperative.

6.4. 30 SW Chief of Safety (30 SW/SE) will:

6.4.1. Inform 30 WS of accidents involving weather personnel.

6.4.2. Identify meteorological requirements for launch operation hazard assessments.

6.4.3. Include new and modified weather instrument and support requirements for launch operations in the RSOR when requested by 30 WS.

6.4.4. Provide required training for 30 WS individuals appointed as Interim Safety Board members or appointed to assist with accident investigations.

6.4.5. Coordinate and recommend approval to 30 SW/CC for range safety constraints concerning natural and triggered lightning. Additionally, ensure documentation of these constraints in EWR 127-1, ***Eastern and Western Range Safety Requirements.***

6.4.6. Provide 30 WS/DOR a letter certifying evaluation of all launch vehicles for triboelectrification. Certification enables launch weather officers to ensure accurate evaluation of the range safety triggered lightning constraint concerning triboelectrification.

6.4.7. Ensure preparation/dissemination of hot-spill THZs associated with launch operations. Weather data necessary for these THZs are provided by the 30 WS Wx Ops personnel.

6.5. 30 SW Chief of Plans (30 SW/XP) will ensure 30th Space Wing develops pre- and post-severe weather response plans IAW guidance established in AFI 10-229.

6.6. 30 SW Chief of Inspections & Exercises (30 SW/IGI) will:

6.6.1. Conduct semi-annual (minimum) exercises of severe weather notification and response actions.

6.6.2. Through EET observance, ensure all supported on-/off-base agencies are performing preventive and response plan procedures for severe weather.

6.6.3. When planning exercises task individual unit EET representatives to record severe weather notification times and the agency notified, then forward to 30 SW/IGI for inclusion in exercise after action reports.

6.7. 30 Civil Engineering Squadron Readiness Flight (30 CES/CEX) will:

6.7.1. Ensure base personnel are educated on local severe weather threat and applicable protective measures.

6.7.2. Ensure 30 SW Oplan 32-1, ***Disaster Preparedness Operations Plan***, includes AFI 10-229 tasks and responsibilities.

6.8. Base Operations (30 OSS/OSAA) will:

6.8.1. Provide maximum advanced notice possible to 30 WS when the airfield will be open or closed outside normal operating hours.

6.8.2. Notify weather observer of any changes in the runway surface condition (RSC) reading according to AFMAN 15-111.

6.8.3. E-mail or Fax daily flying schedules to the Wx Ops, 606-0828.

6.8.4. Conduct PMSV radio checks with the Wx Ops within one hour of the airfield opening.

6.8.5. When notified, submit weather related NOTAM and FLIP updates.

6.9. Air Traffic Control Operations (30 OSS/OSAB). Provide 30 WS personnel indoctrination training on local air traffic control facilities and capabilities.

6.10. Vandenberg Control Tower (30 OSS/OSAB). During tower hours of operation will:

6.10.1. Inform the weather observer whenever the airfield wind sensor is changed.

6.10.2. Inform the weather observer when the active runway is changed.

6.10.3. Inform the Wx Ops when the AMIS is inoperative.

6.10.4. Relay all PIREPs to the Wx Ops forecaster.

6.10.5. Assist the Observer in monitoring weather conditions (perform a Cooperative Weather Watch) by notifying the weather observer of any perceived difference between the observed and reported weather conditions which may affect flight safety. These observations will include but are not limited to:

6.10.5.1. Location and movement of thunderstorms.

6.10.5.2. Rapidly deteriorating visibility/tower visibility.

6.10.5.3. Presence of fog that could hinder an approach and landing of arriving aircraft.

6.10.5.4. Beginning and ending of precipitation.

6.10.5.5. Observed lightning.

6.10.6. Report intensity changes in the high intensity runway lights to the ROS when the prevailing visibility is one mile or less.

6.10.7. Provide the airfield observer or Wx Ops forecaster with a report of any convective activity in the local area.

6.10.8. Report tower visibility as appropriate using values listed in **Attachment 7**.

6.10.9. If workload and duty priorities permit, monitor the 30 WS PMSV frequency during short-term PMSV outages. Per AFMAN 15-129 the forecaster will request the tower to monitor the PMSV frequency and relay all requests to the forecaster during short-term PMSV outages (normally less than 1 hour). Tower may, or may not be able to honor this request.

6.11. 76th Helicopter Flight (76 HF) will:

6.11.1. Provide a weekly flying schedule to 30 WS/DOO.

6.11.2. Provide PIREPs to the Wx Ops forecaster or ROS/airfield observer.

6.11.3. Identify operational weather support required during hours the airfield is closed.

6.12. Western Range Operation Control Center (30 RANS) will:

6.12.1. Advise control tower, if manned, not later than (NLT) 5 minutes prior to 30 WS release of all Jimsphere balloons.

6.12.2. Advise control tower, if manned, of short-notice and delayed Jimsphere releases as soon as possible.

6.13. Frontier Control (30 RANS/DOUN) will:

6.13.1. Notify the Wx Ops (606-8022) when same day changes occur (both additions and deletions) to scheduled flight operations on the WR.

6.13.2. Notify the Wx Ops when unscheduled flight operations requiring weather support occur on the WR.

6.13.3. Direct the weather aircraft as requested by the launch weather officer during all ballistic and spacelift launch operations.

6.13.4. Frontier Control will forward all PIREPS to Wx Ops forecaster, ext. 6-8022. During launch operations, forward PIREPS to the LWO in WCC.

6.14. 30 Communications Squadron (30 CS) will:

6.14.1. Conduct or arrange maintenance on all weather systems and associated circuits as identified in **Attachment 12** and AMIS circuits listed in **Attachment 14**. Restoral priorities are dependant on current launch operations and launch vehicle requirements. Restoral priorities are maintained in the 30 WS on-line outage log.

6.14.2. Ensure 30 WS primary and back-up communications are available to meet customer specified watch/warning/advisory notification timelines.

6.15. 30 LG Program Management Office (30 LG/LGPP) will:

6.15.1. Review, coordinate, and approve all mission requirements when support is provided by 30th Space Wing mission support contracts, e.g. ROMSSC, C4.

6.15.2. Ensure additional (new) mission requirement packages include a mission need statement (MNS) signed by the unit commander or authorized representative.

6.15.3. Ensure weather equipment maintenance of systems listed in **Attachment 13** via mission support contracts. Restoral priorities are dependant on current launch operations and launch vehicle requirements. Restoral priorities are maintained in the 30 WS on-line outage log.

7. Weather Dissemination.

7.1. Automated Meteorological Information System (AMIS). All routine weather observations, forecasts, advisories, watches, warnings, and other products are disseminated via AMIS. See **Attachment 14** for specific units, locations, and equipment. Should a supported agency require, or no longer require, an AMIS terminal for weather support, contact 30 WS/DOO at (606-4016). If AMIS is inoperative, 30 WS will relay to the Command Post weather watches, warnings, advisories, and THZs via telephone. The Command Post will notify Frontier Control, then proceed with **Attachment 11** notifications.

7.2. Telephone Hotlines. Hotlines connect the 30 WS Wx Ops to other VAFB agencies as listed below. Agencies must report hotline outages to 30 CS telephone maintenance at 6-2622.

7.2.1. 30 SW WOC (Bldg 10577)

7.2.2. ROS/Upper Air Observatory (Bldg 1764)

7.2.3. AOS (Bldg 1746)

7.2.4. 30 OSS/OSAA: Base Operations Flight Planning Room (Bldg 1746)

7.2.5. 76 HF (Bldg 1735)

7.3. Closed Circuit Television (CCTV). During WR launch operations, weather information is routinely disseminated via the VAFB CCTV network.

8. Senior Staff/Distinguished Visitor (DV) Support. 30 WS/DOO will provide tailored weather support for senior staff and DV activities. Requesting agency will notify the Weather Operations Flight

(606-3210/8022), at least two duty days prior, if possible, when requesting a trip forecast. At a minimum, include departure and arrival dates, times and locations.

ELIZABETH B. BORELLI, Lt Col, USAF
Commander, 30th Weather Squadron

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

DoD Flight Information Publications

AFMAN 15-111, ***Surface Weather Observations***

AFMAN 15-129, ***Aerospace Weather Operations – Processes and Procedures***

30 SW Plan 32-1, ***Disaster Preparation Operations Plan***

30 SWI 91-106, ***Toxic Hazard Assessments***

30 SWI 10-114, ***Battle Staff Operations***

EWR 127-1, ***Eastern and Western Range Safety Requirements.***

Abbreviations and Acronyms

AFTOX—Air Force Toxic Diffusion Model

AOS—Alternate Observation Site

ASOS—Automated Surface Observation System

ATAD—Automatic Telephone Answering Device

AMIS—Automated Meteorological Information System

CWC—Chemical Warfare Convention

DoD—Department of Defense

EHZ—Emission Hazard Zone

FLIP—DoD Flight Information Publications

HAZMAT—Hazardous Materials

LERTCON—Alert Condition

MARSSS—Meteorological and Range Safety Support System

METWATCH—Meteorological Watch

MSL—Mean Sea Level

NM—Nautical Miles

NOTAM—Notice to Airman

OHZ—Operational Hazard Zone

PHZ—Potential Hazard Zone

PIREP—Pilot Report

PMSV—Pilot-to-Metro-Service

ROS—Representative Observation Site

RSC—Runway Surface Condition

RSOR—Range Safety Operation Requirements

START—Strategic Arms Reduction Treaty

TAF—Terminal Aerodrome Forecast

THZ—Toxic Hazard Zone

UTC—Universal Time Coordinate (ZULU Hour)

VAFB—Vandenberg Air Force Base

Wx Ops—Weather Operations Center (Bldg. 21150)

WR—Western Range

Terms

Aircraft Mishap—Term used to denote the occurrence of an aircraft accident or incident.

Basic Weather Watch—Conducted by weather personnel who, because of location or other duties, cannot monitor the weather continuously. As a minimum, weather is checked at intervals not to exceed 20 minutes.

Ceiling—In aviation forecast code, the ceiling is equal to the height above the earth's surface of the lowest broken (5/8ths coverage or more) or overcast (8/8ths coverage) layer of clouds or the vertical visibility into an indefinite ceiling.

Continuous Weather Watch—Conducted by weather personnel on a continuous basis performing no other significant duties.

Desired Lead Time—The amount of advance notice an agency requires prior to the onset of a particular weather phenomenon.

Indefinite Ceiling—The vertical visibility, measured in feet, into a surface based total obscuration which hides the celestial dome (8/8ths coverage).

Jimsphere Balloon—Weather balloon, tracked by radar, to determine the vertical profile of wind speed and direction.

METWATCH—Meteorological Watch. The process of monitoring the weather and informing designated agencies when certain weather conditions could impact operations or pose a hazard to property or life.

Missile Mishap—A term used to denote the occurrence of a missile accident or incident.

Rawinsonde Balloon—Weather balloon, tracked by radio signal, to determine the vertical profile of wind speed, direction, temperature, humidity, and pressure.

Severe Thunderstorm—Thunderstorms with wind speed greater than or equal to 50 knots and/or hail stones greater than or equal to 3/4 inch in diameter.

Severe Weather—Tornadoes, Funnel Clouds, Water Spouts, and/or Severe Thunderstorms.

Weather Advisory—A special notice provided to supported customers that alerts them to weather conditions that could affect their operation.

Weather Warning—A special notice provided to supported customers that alerts them to weather conditions of such intensity as to pose a hazard to life or property.

Weather Watch—A special notice issued to advise affected agencies of the potential for warning level weather conditions before actually issuing the warning.

Windsonde Balloon—Weather balloon, tracked by radio signal, to determine the vertical profile of wind speed and direction.

Attachment 2

DUTY PRIORITIES

A2.1. Observer Duty Priorities:

A2.1.1. Complete Emergency War Orders Taskings (EWO)

A2.1.2. Respond to aircraft/missile/ground emergencies.

A2.1.3. Perform launch upper air observations

A2.1.4. Disseminate airfield surface observations locally as required.

A2.1.5. Respond to LWO/WRCC/Ops calls during launch operations.

A2.1.6. Perform synoptic upper air observations

A2.1.7. Transmit pilot reports (PIREPs) locally.

A2.1.8. Transmit airfield surface observations and PIREPs longline as required.

A2.1.9. Provide other briefings.

A2.1.10. Perform other duties.

A2.2. Range weather forecaster Duty Priorities:

A2.2.1. Complete Emergency War Orders Taskings (EWO).

A2.2.2. Respond to aircraft/missile/ground emergencies (to include OHZs).

A2.2.3. Disseminate airfield observations locally as required.

A2.2.4. Respond to pilot-to-metro-service (PMSV) calls.

A2.2.5. Issue weather warnings and advisories locally.

A2.2.6. Respond to LWO/WRCC/Ops calls during launch operations.

A2.2.7. Issue Potential Hazard Zone (PHZ) and Emission Hazard Zone (EHZ) forecasts.

A2.2.8. Perform WSR-88D Unit Control Position (UCP) functions.

A2.2.9. Transmit pilot reports (PIREP) locally.

A2.2.10. Transmit surface observations and PIREPs long line as required.

A2.2.11. Prepare and disseminate terminal aerodrome forecasts (TAF).

A2.2.12. Provide flight weather briefings.

A2.2.13. Provide other briefings.

A2.2.14. Perform other duties.

Attachment 3

SAMPLE AVIATION WEATHER FORECAST

KVBG FCST 03-03 32015G25KT 1 -DZ BR SCT003 BKN008 OVC015 LGT-MDT TURB SFC-050 ALTSG29.92INS BECMG 15-16 29007KT 7 NSW SCT005 ALSTG29.86INS WND 29015G22KT AFT 19 LIMITED
MET WATCH 15/0300Z TIL 15/1500Z

Table A3.1. References and Decoded Information.

TAF Reference	Decoded information
KVBG FCST 03-03	Vandenberg AFB 24-hour forecast from 0300Z-0300Z valid until the next BECMG change group (15-16Z)
32015G25KT	Surface wind from 320° (northwest) magnetic at 15 knots with gusts to 25 knots
1	Visibility; 1 statute mile
-DZ BR	Obstructions to vision; light drizzle (-DZ) and mist (BR)
SCT003 BKN008 OVC015	Sky condition; 300ft scattered, 800ft broken, 1500ft overcast (heights are AGL)
LGT-MDT CAT SFC-050	Remarks; light to moderate clear air turbulence from the surface to 5000ft MSL
ALSTG29.92INS	Minimum altimeter for the period
BECMG 15-16	Forecast change group; starting at 1500Z and occurring by 1600Z
29007KT	Surface winds; blowing from 290° at 07 knots
7 NSW	Visibility; 7 statute miles or more; No significant weather
SCT005	Sky condition; 500ft scattered
ALSTG29.86INS	Minimum altimeter for the period
WND 29015G22KT AFT 19	Remarks; surface winds blowing from 290° at 15 knots with gusts to 22 knots after 1900
LIMITED MET WATCH	Remarks; Limited Met Watch (forecast is amended forweather warning criteria only) after 15/0300Z and until 15/1500Z.
Forecast change groups	BECMG; a gradual change of conditions over a 1-2 hour period.
	TEMPO; forecasted conditions will vary temporarily (frequently for short periods).
	FM; a rapid change in forecasted conditions.

TAF Reference	Decoded information
Sky condition	SKC; sky is clear.
	FEW; 1/8-2/8 sky covered by clouds.
	SCT; 3/8-4/8 sky covered by clouds.
	BKN; 5/8-7/8 sky covered by clouds.
	OVC; 8/8 sky covered by clouds.
Obscured sky	The condition when the entire sky is hidden by surface based obscurations.
Partial obscuration	The portion of the sky cover hidden by weather phenomena in contact with the surface.
Common weather descriptors found in the forecast text.	MI-shallow
	BC-patches
	SH-showers
	TS-thunderstorms
	PR-partial
	DZ-drizzle
	RA-rain
	BR-mist (usually associated with a very thin fog)
	FG-fog (used with visibility less than 3/4 sm)
	FU-smoke
	HZ-haze

Attachment 4

AVIATION WEATHER FORECAST AMENDMENT CRITERIA

A4.1. An out-of-category ceiling/visibility condition.

Table A4.1. Category, Ceiling, Visibility.

Category	Ceiling (CIG)	Visibility (VIS)
G	> 3000 feet	> 3 Statute miles
F	> 1500 feet	
E	> 1000 feet	> 2 Statute miles
D	> 700 feet	> 1 Statute mile
C	> 500 feet	> ½ Statute mile
B	> 100 feet	
A	< 100 feet	< ½ Statute mile

NOTE: Ceiling/visibility category is determined by the lower of the ceiling/visibility category. For example, a ceiling of 2500 feet and visibility of 1 statute mile is in Category D.

A4.2. A forecast wind speed error of 10 knots or more, or a wind direction error of greater than or equal to 30 degrees when predominant wind speeds or gusts are, or are forecast to be, in excess of 15 knots.

A4.3. Any of the locally established criteria for weather warnings which:

A4.3.1. Occur, or are expected to occur, during the forecast period, but weren't specified in the forecast.

A4.3.2. Were specified in the forecast, but are no longer occurring or expected to occur, during the forecast period.

A4.4. Turbulence or icing (not associated with thunderstorms) of moderate or greater intensity below 10,000 feet which:

A4.4.1. Occur or are expected to occur during the forecast period but were not specified in the forecast.

A4.4.2. Were specified in the forecast, but are no longer occurring, or expected to occur during the forecast period.

A4.5. Thunderstorms are incorrect by forecasted start or end time.

A4.6. The Wx Ops forecaster doesn't consider the TAF to be representative of existing conditions and those conditions are expected to last for 30 minutes or longer.

Attachment 5

SAMPLE WESTERN RANGE LAUNCH WEATHER FORECAST

Figure A5.1. Sample Forecast.

	L-1 Day Forecast Western Range Launch Operation Forecast W1234 Issued: DDMMYY HHMMZ Valid: DDMMYY HHMMZ		
Vehicle/Payload: Minuteman III GT-123 A			
Location: VAFB LF-26			
Launch Weather Officer: Capt John Doe DSN: 276-xxxx; Comm: 805-606-xxxx			
LAUNCH FORECAST: Synoptic Discussion: High pressure dominates the western coast of the US. The storm track is well to the north of California and extends across the Washington-Oregon border, through the Pacific Northwest, then dips south along the eastern edge of the Rocky Mountains.			
Clouds: Stratus	Coverage Scattered 3/8ths	Bases 500 ft	Tops 900 ft
Visibility: 7+ Miles Wind: 330° 15 G 25 Kt Temperature: 45 - 49°F Weather: No Significant Weather			
Overall probability of violating weather constraints: 20% Area of concern: Surface winds			
Overall probability of violating weather constraints for 24 Hour Delay: 70% Area of concern: Layered Clouds and Upper level winds			
Next Forecast To Be Issued: DDMMYY HHMMZ			

Attachment 6

TOXIC HAZARD ZONE FORECASTS

A6.1. Potential Hazard Zone (PHZ): The PHZ is established for an operation should a accidental spill or unplanned emission occur. A PHZ has Zone 2 and 3 based upon the current allowable exposure criteria. PHZs issued for N2O4 will also have a Zone 1 calculated, however not disseminated unless requested. A PHZ is also issued for the transport of non-rocket propellant, toxic commodities. In this case, only one downwind distance, taken from DoT Pamphlet 5800.5, is given.

A6.2. Emission Hazard Zone (EHZ): The EHZ is established prior to the planned emission of toxic propellants into the atmosphere (e.g., tank venting). EHZs are based upon the concentration values listed in Table 3-1 of 30 SWI 91-106.

A6.3. Operational Hazard Zone (OHZ): This THZ is established following the accidental or unplanned release of a toxic commodity to the environment. If a PHZ was previously in effect, the PHZ becomes the OHZ until a new OHZ can be calculated based upon exactly how much was released to the environment and predicted weather conditions. OHZs are based upon the Zone 1, 2 and 3 concentration levels, with Zone 1 being the maximum allowable for sensitive individuals. OHZs are issued at 15 minute intervals for as long as the accident or exercise scenario exists. Dissemination is via AMIS and other communication systems. For more detailed information on hazardous material emergency response, see 30 SW Plan 32-4002, Hazardous Materials (HAZMAT) Emergency Response Plan.

NOTE: All wind directions are with respect to true North.

A6.4. THZs are amended when:

A6.4.1. Issued distance is more than 500 feet and the 45/90 minute distance exceeds the initial distance by 500 feet or 10%, whichever is greater.

A6.4.2. Issued distance is 500 feet or less and the 45/90 minute distance exceeds the initial distance by 50 feet or 20%, whichever is greater.

A6.4.3. Observed wind speed is less than 4 knots and initial forecast area was not circular.

A6.4.4. Observed wind speed is 4 knots or greater and initial forecast area was circular.

A6.4.5. Observed wind direction differs from the initial wind direction by plus or minus 20 degrees or more.

A6.5. SAMPLE POTENTIAL HAZARD ZONE (as disseminated over AMIS)

VANDENBERG AFB PHZ#22 WEATHER MESSAGE
VALID 17 / 1700Z (17 / 0900L) TO 17 / 1900Z (17 / 1100L)
SITE: SLC-4E
DELTA T: -1.8 DEG F
WIND: 280 DEG AT 4 KTS
DIR DEV: 44 DEG
AZIMUTH: 040 DEG CW TO 140 DEG
CHEMICAL: N204
SOURCE STRENGTH: 100 SQ / FT
ZONE 3 DISTANCE: 1048 FT
ZONE 2 DISTANCE: 3332 FT
ZONE 1 DISTANCE: XXXX FT [calculated only for N2O4/disseminated if requested]

REMARKS: NONE

TIME / INIT: 56 / JJ

Table A6.1. References and Decoded Information.

PHZ Reference	Decoded information
PHZ#22	Running number of PHZs issued this month
VALID 17 / 1700Z (17 / 0900L) TO 17 / 1900Z (17 / 1100L)	Date/Valid time (Zulu and Local)
SITE: SLC-4E	Location of operations
DELTA T: -1.8 DEG F	Change in temperature between 12' and 54' levels of wind tower nearest site
WIND: 280 DEG AT 4 KTS	Wind direction and speed
DIR DEV: 44 DEG	Variability of wind direction (+ or - 22 deg of 280)
AZIMUTH: 040 DEG CW TO 140 DEG	Area downwind of spill (CW = clockwise)
CHEMICAL: N204	Chemical type
SOURCE STRENGTH: 100 SQ / FT	Wetted area for potential spill
ZONE 3 DISTANCE: 1048 FT	End distance of highest concentration of chemical from release point

PHZ Reference	Decoded information
ZONE 2 DISTANCE: 3332 FT	End distance of second highest concentration of chemical from release point
ZONE 1 DISTANCE: XXXXXFT	End distance of lowest concentration of chemical from release point
TIME / INIT: 56 / JJ	Issue time in minutes prior to the valid time (17 / 1656Z) and initials of range forecaster

Attachment 7

SPECIAL OBSERVATION CRITERIA

Table A7.1. Special Observation Criteria.

DEFINITION	CRITERION	THRESHOLD VALUE
Ceiling	Ceiling forms or dissipates below, decreases to less than, or if below, increases to equal or exceed.	3000, 2400, 1500, 1000, 700, 600, 500, 400, 300, 200, 100 feet
Sky Condition	A layer of clouds or obscuring phenomena aloft is present below the following height and no layer was reported in the proceeding observation.	600 feet
Visibility	Prevailing visibility decreases to less than, or, if below, increases to equal or exceed.	3, 2, 1 1/2, 1 1/4, 1, 3/4, 1/2 statute miles
Tornado, Water Spout or Funnel Cloud	Phenomena observed, disappears from sight, or occurred within the past hour according to an outside source and wasn't observed or recorded at the ROS.	N/A
Thunderstorm	Thunderstorm begins, increases in intensity, or ends.	N/A
Precipitation	Hail begins or ends. Freezing precipitation or ice pellets begin, end, or change intensity. Any other precipitation type begins or ends.	N/A
Wind Speed	Average 2-minute wind speed suddenly increases to twice, or more than twice, the currently reported wind speed, and exceeds 25 knots.	N/A
Wind Direction	Wind direction changes by 45 degrees or more in less than 15 minutes with sustained winds of 10 knots or more throughout the wind shift.	N/A
Tower Visibility	Upon receipt of a reportable tower prevailing visibility value, when either the weather observing site or tower prevailing visibility is less than 4 miles (6000 meters) and the tower prevailing visibility differs from the weather observing site visibility by a reportable value, transmit a SPECI with the tower visibility as a remark.	3, 2, 1 1/2, 1 1/4, 1, 3/4, 1/2 statute miles

DEFINITION	CRITERION	THRESHOLD VALUE
Runway Surface Condition (RSC)	A new or revised RSC received from Base Operations.	N/A
AEROB	When notified of a real-world nuclear accident.	N/A
Volcanic Ash	When first observed	N/A
Miscellaneous	Any other meteorological situation, in which, in the opinion of the observer is critical to aircraft safety.	N/A

These values are derived from the published minima in the DoD Flight Information Publication and are subject to periodic change. Current listing is available at Base Operations.

NOTE: Unless otherwise specifically identified in the text of a message, all times are UTC, temperatures are degrees Fahrenheit, and all surface winds are magnetic.

Attachment 8

LOCAL OBSERVATION CRITERIA

Table A8.1. Local Observation Criteria.

DEFINITION	CRITERION
Aircraft or Missile Mishap	Immediately upon notification or observation of a mishap, accident or incident.
Missile Launch	Immediately upon notification of a launch when ROS is manned.
Active Runway Change	Whenever notified of change in active runway.
Wind	Mean or maximum wind speed first exceeds 35 knots, 50 knots, or 65 knots. Gust spread of 20 knots or greater.
Altimeter Setting	At a frequency not to exceed 35 minutes when there has been a change of 0.01 inches since the last locally disseminated value.
Miscellaneous	For any other meteorological situation which, in the opinion of the observer, is significant to local operations.

NOTE: Unless otherwise specifically identified in the text of a message, all times are UTC, temperatures are degrees Fahrenheit, and all surface winds are magnetic.

Attachment 9

WEATHER WARNINGS AND WATCHES

Table A9.1. Weather Warning Criteria

CRITERIA	DESIRED LEADTIME	LOCATION
Tornado	15 Min	Within 10NM of VAFB boundary
Surface Wind 35-49kt For elevations below 1000'Excluding tower 53	1 Hour	North Vandenberg South Vandenberg Airfield (When ROS is open)
Surface Wind ≥ 50 kt For elevations below 1000' Excluding tower 53	2 Hours	North Vandenberg South Vandenberg Airfield (When ROS is open)
Rain ≥ 2" within a 12 hours	1 Hour	Within 10NM of VAFB boundary
Hail ≥ ¼"	2 Hours	Within 10NM of VAFB boundary
Lightning/Thunderstorms	Observed	Within 10NM of VAFB boundary

Table A9.2. Weather Watch Criteria

CRITERIA	DESIRED LEADTIME	LOCATION
Lightning/Thunderstorms	2 Hours	Within 10NM of VAFB boundary
Surface Wind ≥ 65 kt	2 Hours	For elevations above 1000' and tower 53 (Boat House)

NOTE: Desired lead-time is the advance notice a supported agency needs to react to an advisory or warning/watch and put protective measures into effect.

Attachment 10

WEATHER ADVISORIES

Table A10.1. Weather Advisory Criteria.

CRITERIA	DESIRED LEADTIME	LOCATION
Icing (Any intensity) SFC to 10,000 feet	Observed	Within 10NM of VAFB boundary
Turbulence (Moderate or greater) SFC to 10,000 feet	Observed	Within 10NM of VAFB boundary
Low-Level Wind Shear below 2,000 feet above ground level (AGL)	Observed	Within 10NM of VAFB boundary
Surface Wind Gust Spread 20kts or greater	Observed	Airfield (flagged on ROS observation as "WA GUST SPREAD")

Attachment 11

ORGANIZATIONS NOTIFIED OF WEATHER WARNINGS/WATCHES/ADVISORIES BY 30 SW/CP

Table A11.1. Weather Notification List.

ORGANIZATION	PHONE	REMARKS
LCC		If operational, all notices
76 HF		When Flying, all notices
Incoming Aircrew	Notify by radio	If Base Ops is closed, all notices
30 CES/CEF (FD)	6-5389/5971	24 Hrs, all notices
576 FLTS/FTMO	HOTLINE/6-9061	24 Hrs, all notices
DCC	HOTLINE	24 Hrs all notices
NRO/OL VNBG	Duty hrs: 6-2700 Non-duty hrs: 6-4339	24 Hrs, all notices
WR Network Segment Control	6-3551/3556	24 Hrs, all notices
14 AF AOC	6-9951/9994	24 Hrs, all warning/watches
BNCC	HOTLINE/6-2622	24 Hrs, all warnings/watches
381 TRG	6-4315/6-5376	24 Hrs, NVAFB warnings/watches
Det 1, 22 SOPS (VTS)	5-7305	24 Hrs, NVAFB warning/watches
SLC-4	5-4465 - Notify S/B Duty Off if Ops Ctr Unmanned	24 Hrs, SVAFB Warnings Below 1,000’ MSL only
Astrotech	734-1102	24 Hrs, Lightning only
Bldg 1819, Missile Assembly Bldg	734-3488/9730	24 Hrs, Lightning only
Boeing MPT Operators	6-4728	24 Hrs, Lightning only
DET 9/SMC	6-6771	24 Hrs, Lightning only
30 CONS/LGCP	6-6738/1190/6329/6120/5-8479	Duty Hrs, all notices
Fuels Control	6-6867/6869	Duty Hrs, all notices
Hazardous Waste Collection Point	6-8438	Duty Hrs, all notices
Space Systems International	5-3977	Duty Hrs, SVAFB warnings/ watches
30 MDG/SGSLF	6-9476	Duty Hrs, Lightning only
Orbital Sciences	734-5400	Duty Hrs, Lightning only
Golf Course Pro Shop	6-6262	When Open, Lightning only

Attachment 12

WEATHER EQUIPMENT MAINTENANCE--30 CS

Table A12.1. Weather Equipment Quantity/Location.

EQUIPMENT	QUANTITY	LOCATION	RESTORAL PRIORITY
FMQ-8 (Temp/Dew Pt)	1	Airfield	2
FMQ-13 (Digital Wind System)	1	Airfield	2
FMQ-12 (Digital Ionospheric Sounder)	1	21150	3
GMQ-32 (Transmissometer Set)	1	Airfield	2
GMQ-34 (Laser Ceiliometer)	1	Airfield	2
ML-17 (Rain Gauge)	1	21150	2
ML-102 (Anaroid Barometer)	2	1764, 1746	2
ML-658 (Digital Barometer)	3	1764, 900, 1746	2
PMSV (Pilot-to-Metro Service)	1	21150	1
WSR-88D (Weather Surveillance Radar)	1	Bldg 1, Orcutt	1
Principle User Processor (PUP)	1	21150	1

Attachment 13

WEATHER EQUIPMENT MAINTENANCE—30 LG/LGQP (VIA 30 SW MISSION SUPPORT CONTRACTS)

Table A13.1. Weather Equipment Quantity/Location.

EQUIPMENT	QUANTITY	LOCATION	RESTORAL PRIORITY
Automated Surface Observing System (ASOS)	3	Airfield, SLC-4, LF-03	1
Automated Weather Interactive Processing System (AWIPS)	1	21150	2
Back-up generators	2	21150, 1764	3
Closed Circuit TV	1	21150 and ROS	3
Doppler Acoustic Sounding System (DASS)	2	1764, LF-03	3
Lightning Locator and Protection System (LLPS)	1	21150	3
Meteorological and Range Safety Support System (MARSSS)	2	21150	1
Meteorological Interactive Data Display System –Vandenberg (MIDDS-V)	1	21150	1
Meteorological Sounding System (MSS)	2	1764, 900	1
Portable Remote Automated Weather System (PRAWS)	1	VAFB	3
Real Time Rawinsonde/Windsonde Processing System (RTR/WPS)	2	21150	1
Uninterruptable Power Supplies	3	21150, 1764	3
WIND Towers	24	VAFB	2

Attachment 14

VANDENBERG AFB AMIS EQUIPMENT/CIRCUIT LISTING

Table A14.1. AMIS Equipment/Circuit Listing

FUNCTIONAL AREA	BLDG/RM	CIRCUIT	PHONE#	RESTORAL PRIORITY
♦ * C/DM	21150/122	N/A	6-8022	1
♦ * BWS00	21150/110	Local Area Network	6-8022	1
♦ * BWSP0	21150/110	Local Area Network	6-8022	1
♦ * SWO00	21150/110	Local Area Network	6-8022	1
♦ OBS00-(ROS)	1746/107	AMIS-1746-4	6-6260	2
* ATC00 / Tower	1748/Level 7	AMIS-1748-1	6-6287	2
* ATC01 / Tower	1748/Level 7	AMIS-1748-2	6-6287	2
* FOP00-Command Post	10577/B202	AMIS-10577-0	6-6300	1
✚ FOP01-CSS	10577/B204	AMIS-10577-1	6-6300	2
✚ FOP02-Alternate Command Post	7000/100	AMIS-7000-3	6-6300	2
FOP03-576 TMOO Ops Center	6601/12	AMIS-6601	6-6095	2
FOP04-Lockheed Martin CIC	8401/29	AMIS-8401	5-2246	4
FOP06-Fire Dept	10660/110	AMIS-1740	6-5380	2
FOP07-SLC-3E	763/Firing Rm	AMIS-763	5-5276	2
♦ FOP09-SLC-2 Support Ops	8510/147	AMIS-8510-1	6-6340(465)	2
♦ * FOP11-Frontier Control	7000/241	AMIS-7000-0	6-3602	1
✚ FOP13-SLC-3 Launch Control	8510/145	AMIS-8510 (NVBG)	5-5276	2
FOP14-76 HF	1735/ODO Rm	AMIS-1735	6-4725	2
✚ FOP16-SLC-3-Launch Control	761/114	AMIS-763	5-5276	2
FOP18-CE Service Desk	11439/107	AMIS-11439	6-1856	2
♦ FOP19-United Paradyne	7525/203C	AMIS-761	6-7451	2
FOP20-SLC-4W Launch Control	730/101	AMIS-730	5-4465	2
FOP21-SLC-4E Launch Control	730/102	AMIS-730-1	5-4465	2
FOP22-SLC-4 Operations Center	731/160	AMIS-731	5-4465	2
✚ FOP23-DMSP Facility (2nd SLS)	1559/105	AMIS-1559	6-6641	2
♦ FOP24-SLC-2 Blockhouse	1622/2	AMIS-1622	6-4100	2

FUNCTIONAL AREA	BLDG/RM	CIRCUIT	PHONE#	RESTORAL PRIORITY

* = Critical Path Component.

✚ = Terminal will normally be in a "DOWN" status- the facility is not normally manned or the system is a backup.

♦ = Terminals on the 30 WS account. All others are owned by the using organizations

Attachment 15

COMMUNICATION OUTAGE BACKUP PROCEDURES

A15.1. AMIS. If an individual AMIS unit breaks, use AOS account as a backup. If both these systems are down, the base telephone is the back-up system. Notify the Wx Ops forecaster at extension 6-8022. 30 WS/DOO will notify the Control Tower; Command Post; Base Operations and WCC (when manned) only for further dissemination of weather information if the entire AMIS/AOS system is not operational.

A15.2. PMSV. Edwards AFB provides backup PMSV coverage during extended PMSV outages.

A15.3. Hotlines. If a hotline goes out, regular base telephones will be used.